

Applicant : Xiabin Bai e
Serial No. : Unassigned
Filed : Herewith
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Attorney's Docket No.: 13479-
002001 / PCTIM0004CN-US

Remarks

The present application claims priority from Chinese Application 99103828.2 through International Patent Application PCT/CN00/00039.

Applicants have amended the dependency of claims 2-11 and 13-14 to preclude a rejection under 35 U.S.C. 112, fifth paragraph, which provides in part that “ (a) multiple dependent claim shall not serve as a basis for any other multiple dependent claim.” No new matter has been added by the above amendments.

Claims 1-17 are now pending. Prompt examination of the present application, as amended, is respectfully requested.

Attached is a marked-up version of the changes being made by the current amendment.

Applicant asks that all claims be examined. Enclosed is a Enter \$ amount check for excess claim fees and a Enter \$ amount check for the Petition for Extension of Time fee. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 9-7-01

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Version with markings to show changes made

In the claims:

Claims 2-11, 13, and 14 have been amended as follows:

2. (Amended) The multiple-pole electric machine as claimed [as] in Claim 1, wherein said armature winding is a wave winding without being lapped at the extension.
3. (Amended) The multiple-pole electric machine as claimed [as] in Claim 1, wherein said armature winding is a wave winding being partially lapped at the extension.
4. (Amended) The multiple-pole electric machine as claimed [as] in Claim 1, wherein said armature winding is a pole-pitch wave winding.
5. (Amended) The multiple-pole electric machine as claimed [as Claim 1, or 2, or 3 or 4] in Claim 1, wherein said armature winding is located in the slot with a single strand of the wires in each layer and both two sides of the wires contact the wall of the iron core.
6. (Amended) The multiple-pole electric machine as claimed [as Claim 1, 2, 3, or 4] in Claim 1, wherein said armature winding is located in the slot with double-strand of the wires in each layer and one of the left side and the right side of the wires contacts the wall of the iron core.
7. (Amended) The multiple-pole electric machine as claimed [as] in Claim 2, wherein each pole has m slots; a phase winding is resulted by m windings on each layer; and said m windings are arranged to cross m adjacent slots in the same direction and not being lapped at the extension; the different phase windings can be obtained by translating said m windings on different layers.

8. (Amended) The multiple-pole electric machine as claimed [as] in Claim 3, wherein said number of slots belonging to each pole of the iron core is $m \times k$, where m is the number of phase and k is the number of slot occupied by one phase belt; each phase winding comprises k windings, said k windings are arranged to cross k slots from one extension in the same direction, to cross one pole span without being lapped at the other extension, and to come back to the original extension from another k slots there they are not lapped; and all m phase windings on each layer may be obtained by translating said phase winding comprising k windings by $n \times k$ slots, where n is an integer.

9. (Amended) The multiple-pole electric machine as claimed [as] in Claim 4, wherein each pole comprises m slots; m phase windings are formed on each layer by m windings and are overlapped each other at the extension; and each phase winding is formed by a pole-pitch wave winding.

10. (Amended) The multiple-pole electric machine as claimed [as] in Claim 1, wherein said rotor is of electric exciting; the slot of the iron core are straight; each pole occupies one slot; and said winding is a pole-pitch wave winding wound by a single strand or a double-strand of solid wires and is not lapped at the extension.

11. (Amended) The multiple-pole electric machine as claimed [as] in Claim 1, wherein there is an inclination g between the p - m pole of the rotor and the tooth slot of the stator, and the length of the iron core L is met: $L \sin(g) \leq 2T$, where T is the tooth pitch, g is an inclined angle.

13. (Amended) The multiple-pole electric machine as claimed [as] in Claim 12, wherein said armature winding is a surface wave winding without being lapped at the extension, and comprises k strands of wires in a single phase winding, wherein said k strands of wires are arranged side by side in the same vertical direction to transversely cross the surface of the iron core from the lower extension to the upper extension without being lapped with each other, and

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to come back to the lower extension from crossing vertically the surface of the iron core after passing through a pole span at the upper extension, without being lapped; and said k strands of wires are arranged side by side on the surface into a single layer and occupies a width of a phase belt of a phase winding.

14. (Amended) The multiple-pole electric machine as claimed [as] in Claim 12, wherein said armature winding is a surface wave winding being partially lapped, and has m phase windings, each of which is a surface wave winding comprising k strands of wires without being lapped at the extension; and said m phase windings are obtained by translating said surface wave winding with k strands of wires and are lapped each other at the extension.

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